

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A heat transfer element, comprising:

a container having first and second tapered ends, the first tapered end including a heat input section for receiving heat generated by a heating element, and the second tapered end including a heat output section for radiating the heat outside, the container composed of a resin containing a thermoconductive material wherein the container has a groove therein configured to generate a capillary force, the groove extending from the first tapered end to the second tapered end; and

a coolant in the container, wherein the coolant is transferred as a liquid from the heat output section to the heat input section by the capillary force and the coolant is transferred as a gas from the heat input section to the heat output section by gas pressure, wherein the thermoconductive material forming the container includes carbon nanotubes.

Claim 2 (Canceled).

Claim 3 (Withdrawn): A heat transfer element according to claim 1, wherein the thermoconductive material includes graphite.

Claim 4 (Withdrawn): A heat transfer element according to claim 1, wherein the thermoconductive material includes insert-molded graphite sheets.

Claim 5 (Withdrawn): A heat transfer element according to claim 1, wherein the thermoconductive material includes aluminum filler.

Claim 6 (Withdrawn): A heat transfer element according to claim 1, wherein the thermoconductive material includes aluminum nitride filler.

Claim 7 (Previously Presented): A heat transfer element according to claim 1, wherein the capillary action member includes grooves provided between the heat input section and the heat output section inside the container.

Claim 8 (Withdrawn): A heat transfer element according to claim 1, wherein the capillary action member includes a mesh member provided between the heat input section and the heat output section inside the container.

Claim 9 (Withdrawn): A heat transfer element according to claim 1, wherein the capillary action member includes knurls provided between the heat input section and the heat output section inside the container.

Claim 10 (Withdrawn): A heat transfer element according to claim 1, wherein the capillary action member includes sintered powder provided between the heat input section and the heat output section inside the container.

Claim 11 (Currently Amended): An electronic device having a heat transfer element disposed in a casing of the electronic device to transfer heat generated by a heating element, the heat transfer element comprising:

a container having first and second tapered ends, the first tapered end including a heat input section for receiving the heat generated by the heating element, and the second tapered end including a heat output section for radiating the heat outside, the container composed of a

resin containing a thermoconductive material wherein the container has a groove therein configured to generate a capillary force, the groove extending from the first tapered end to the second tapered end; and

a coolant in the container, wherein the coolant is transferred as a liquid from the heat output section to the heat input section by the capillary force and the coolant is transferred as a gas from the heat input section to the heat output section by gas pressure, wherein the thermoconductive material forming the container includes carbon nanotubes.

Claim 12 (Currently Amended): A cooling device, comprising:

a heat transfer element that receives heat generated by a heating element from a heat input section and that radiates the heat transferred from the heat input section to the outside from a heat output section;

a heat sink disposed adjacent to the heat output section of the heat transfer element to radiate the heat received from the heat output section; and

a fan that rotates to supply cooling air to the heat sink,

wherein the heat transfer element comprises:

a container having first and second tapered ends, the first tapered end including the heat input section and the second tapered end including the heat output section, the container composed of a resin containing a thermoconductive material wherein the container has a groove therein configured to generate a capillary force, the groove extending from the first tapered end to the second tapered end; and

a coolant in the container, wherein the coolant is transferred as a liquid from the heat output section to the heat input section by the capillary force and the coolant is transferred as a gas from the heat input section to the heat output section by gas pressure,

wherein the thermoconductive material forming the container includes carbon nanotubes.

Claim 13 (Withdrawn): A cooling device according to claim 12, wherein the fan is disposed inside a housing that is formed integrally with the container.

Claim 14 (Currently Amended): An electronic device having a cooling device for performing cooling by radiating heat generated by a heating element to the outside, the cooling device comprising:

a heat transfer element that receives the heat generated by the heating element from a heat input section and that radiates the heat transferred from the heat input section to the outside from a heat output section;

a heat sink disposed adjacent to the heat output section of the heat transfer element to radiate the heat from the heat output section; and

a fan that rotates to supply cooling air to the heat sink,

wherein the heat transfer element comprises:

a container having first and second tapered ends, the first tapered end including the heat input section and the second tapered end including the heat output section, the container composed of a resin containing a thermoconductive material wherein the container has a groove therein configured to generate a capillary force, the groove extending from the first tapered end to the second tapered end; and

a coolant in the container, wherein the coolant is transferred as a liquid from the heat output section to the heat input section by the capillary force and the coolant is transferred as a gas from the heat input section to the heat output section by gas pressure,

wherein the thermoconductive material forming the container includes carbon nanotubes.

Claim 15 (Withdrawn): An electronic device according to claim 14, wherein the fan is disposed inside a housing that is formed integrally with the container.